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REMARKS

Claims 1, 3-9, 12-28 and 38 are pending in the application.

Claims 1, 3, and 18 are amended above.

Claims 2 and 10-11 are cancelled from the application above without prejudice.

Claims 29-37 remain withdrawn from consideration.

No new matter has been added to the application by these amendments.

The examiner's claim rejections are overcome or they are traversed as set forth below.

I. THE 112, 2nd PARAGRAPH REJECTION OF CLAIMS 10-11

The examiner rejected claims 10-11 for using the term "flowable oxide". It is the examiner's position that the term is a Trademark. The term "flowable oxide" is not a Trademark. Indeed, many company's manufacture flowable oxide materials under different Trademarks. For example, flowable oxides include the FOx® line of products from Dow Corning Corp. (Midland, Mich.), the FLARE™ and HOSP™ line of products from Honeywell Electronic Materials (Sunnyvale, Calif.), or the SiLK™ line of products from Dow Chemical Company (Midland, Mich.). Clearly, "flowable oxides" is not a trade name and the examiner's rejection of claims 10-11 on this ground should be withdrawn.

II. THE ANTICIPATION REJECTIONS

A. Traverse of the Anticipation Rejection of Claims 1-2, 6-8, 10, 17-20 and 22-23

The examiner rejected claims 1-2, 6-8, 10, 17-20 and 22-23 for being anticipated by the van Beek et al Article.

The examiner's rejection is overcome by amending claims 1 and 18 in a manner that excludes rubber as a possible mixing medium material.

B. Traverse of the Anticipation Rejection of Claims 1, 4-8, 13-14 and 17

The examiner rejected claims 1, 4-8, 13-14 and 17 for anticipation by Karabutov et al. IEEE 2001. This rejection is overcome by amending claims 1 and 18 in a manner that limits the mixing medium to compositions not disclosed in the Karabutov article.

C. Traverse of the Anticipation Rejection Of Claims 1-2, 5-9, 12-15, 18, 20 and 22-28

The examiner rejected claims 1-2, 5-9, 12-15, 18, 20 and 22-28 as being anticipated by U.S. Patent No. 5,948,465.

The '465 patent does not anticipate the claimed invention because it does not disclose an emitter composition that includes both carbon black and a mixing medium. The '465 patent discloses preparing a metal depositing solution including a solvent such as water, depositing the solution on a substrate, and then emitting powder particles onto the metal solution containing substrate. (E.g., Col. 3, lines 33-52). The '465 patent does not disclose combining carbon black particles with any solution. Therefore the '465 patent does not disclose a composition including "mixing medium" of any kind. For at least this reason, the '465 patent does not anticipate any of the application claims.

D. Traverse of the Anticipation Rejection Of Claims 1-8, 10-19 and 21-28

The examiner rejected claims 1-8, 10-19 and 21-28 for being anticipated by U.S. published application no. US2004/0025732 to Tuck et al. The Tuck et al. patent does not anticipate the claimed invention for each of the grounds recited below.

Independent claims 1 and 18 are amended above to recite specific composition "mixing medium". The recited mixing medium are not disclosed or suggested by Tuck et al. In particular:

- The silica sol-gel does not fall within the scope of any of the currently claimed mixing mediums. In addition, the silica sol-gel is added to the Tuck et al. composition in order to form a solid upon curing.
- The polysiloxane is no longer included within the listing of claimed mixing medium.
- The Silsequioxane is no longer included within the listing of claimed mixing medium ingredients.
- The CMC (carboxymethylcellulose) recited in Tuck et al. does not fall within the scope of the specific polymer ingredients now claimed.
- The PVA (polyvinyl alcohol) is not a polymer as recited in Tuck et al. Instead, PVA is a solvent. Moreover, the PVA does not fall within the scope of the specific polymer ingredients now claimed.

III. THE OBVIOUSNESS REJECTIONS

A. Traverse of the Obviousness Rejection of Claims 3, 10-11, 16-17, 19 and 21

The examiner rejected claims 3, 10-11, 16-17, 19 and 21 for being obvious over the '465 Patent in view of the Tuck et al patent. As recited above, the '465 patent fails to disclose combining a carbon black powder with any liquid. As a result, there is no motivation to combine the references as the examiner has. Specifically, there is no motivation to include any ingredients with the carbon black of the '465 patent because the carbon black is expressly applied as a powder. Therefore the examiner has failed to establish a *prima facie* case of obviousness and this rejection must be withdrawn.

B. Traverse of the Obviousness Rejection of Claims 9 and 20

The examiner rejected claims 9 and 20 over the Tuck et al. patent in view of the '465 patent. The examiner relies upon the '465 patent for disclosing the use of carbon soot and the measurement of field emitter properties.

The combination of Tuck et al. and the '465 patent do not render claims 9 and 20 obvious. In particular, neither reference discloses any of the currently claimed mixing medium. For at least this reason, claims 9 and 20 are nonobvious and patentable.

IV. NEW CLAIM 39 IS PATENTABLE

New method claim 39 has been added to the application. Method claim 39 generally covers a method for forming a sealed emitter composition layer on a substrate. One of the claim steps is planarizing the field emitter composition layer by chemical mechanical polishing. None of the references recited by the examiner discloses planarizing a field emitter composition layer by this method. For at least this reason, claim 39 is believed to be novel and non-obvious over the prior art of record.

CONCLUSION

Pending claims 1, 3-9, 12-28 and 38 are believed to be patentable for the reasons indicated above. Favorable reconsideration and allowance of all pending application claims is, therefore, courteously solicited.

Respectfully Submitted

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